

# D1445-XY-T220L-2



## Acousto-Optic Dual Axis Deflector

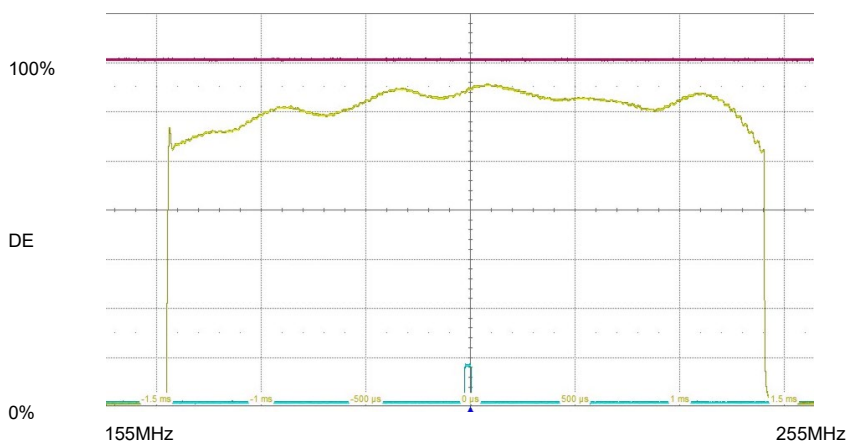
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This D1445-XY dual axis AO deflector is designed for operation in the deep blue spectrum. Each deflector incorporates two section acoustic beam steering to produce an efficient uniform scan response. Applications include high speed, multi-point or continuous beam scanning.

### SPECIFICATIONS

Operating A/R Wavelengths:	360-440 nm
Optical Power:	5 Watts **
Interaction Medium:	Tellurium Dioxide (TeO <sub>2</sub> )
Acoustic Velocity:	4.2mm/μs
Centre Frequency (Fc):	220MHz (+/- 15% for best BW)
RF Bandwidth (BW):	>85MHz, 100MHz typical
Input Impedance / VSWR:	50Ω Nominal / <1.7:1 @ Fc
RF Power:	< 1.4 Watts total per axis.
Clear Aperture:	3mm
Active Aperture Height:	2mm
Static Insertion Loss / Reflectivity:	<3% / <0.5%/surface at 0.4um
Laser Polarization:	Any
	<b>399nm    405nm    411nm</b>
Bragg Angle (mrad):	10.45    10.6    10.8
Separation Angle at Fc	20.9    21.2    21.5
Scan Angle, 85MHz sweep (mrad):	8.1    8.2    8.3
<u>Deflector Performance:</u>	Using 2 x 2mm beam
Total XY Efficiency	~60% across 85MHz scan
Access Time:	0.47μsec
Resolution:	40 x 40 <u>resolvable</u> spots
	>1000 x 1000 non-resolvable points

### Typical Scan Efficiency at 374nm PER AXIS \*

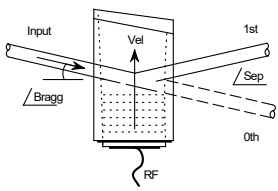


\* Single mode input

\*\* For higher powers please contact Isomet

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**  
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**Quality Assured.**  
 In-house: Crystal Growth,  
 Optical Polishing,  
 A/R coating, Vacuum Bonding



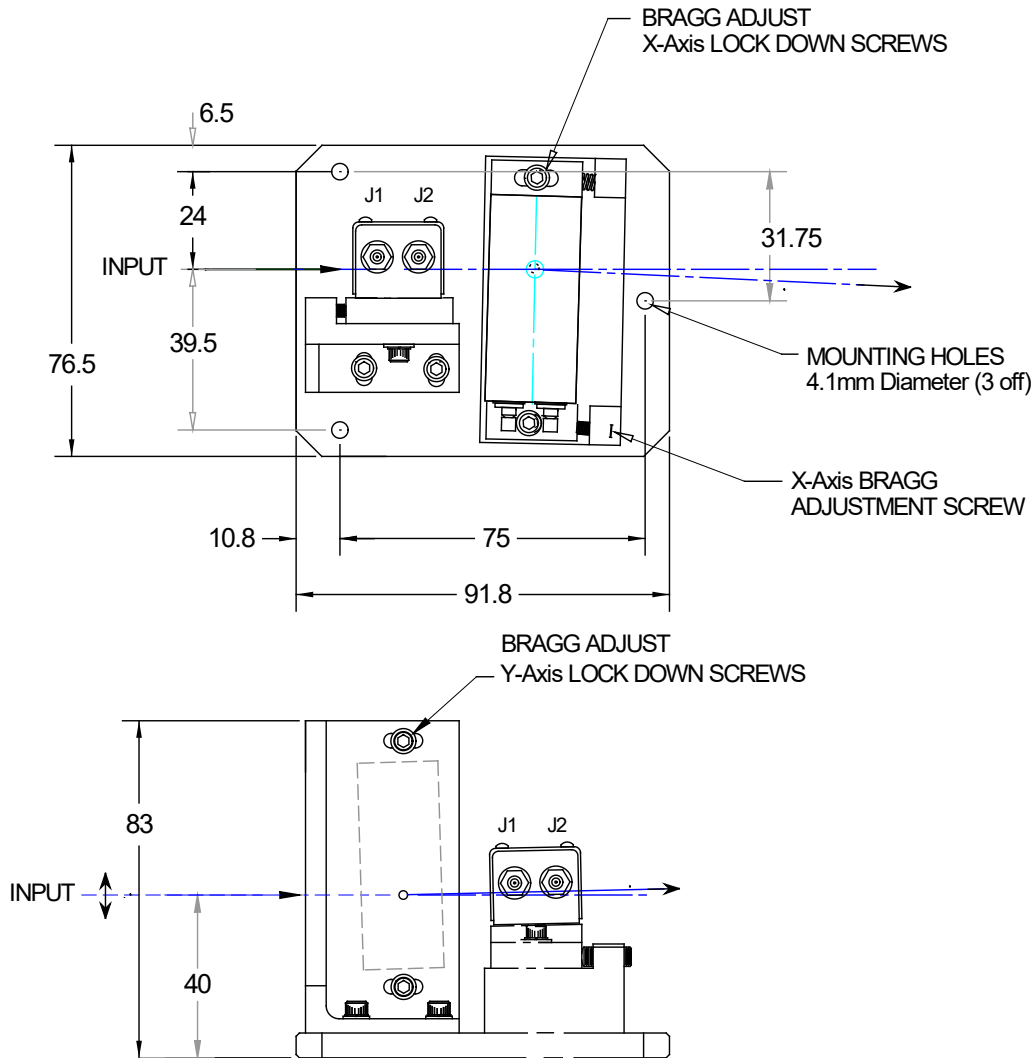
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### OUTLINE DRAWING



### RF DRIVERS

Isomet Synthesizer: iMS2-HF + (2x) BSM1445-220 splitter/delay module + (4x) AF0-200T-1-1 amplifiers.

External freq' source: (2x) BSM1445-220 splitter/delay module + (4x) AF0-200T-1-1 amplifiers.

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